A new species of Agaon from Nigeria, and some additional records (Hymenoptera, Chalcidoidea, Agaonidae)

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ABSTRACT. A collection of fig insects made by Dr. J. T. Medler in Nigeria, contains a new species of the genus Agaon Dalman, 1818; it is described in this paper. The localities and a host record for some other species worth mentioning are recorded below, including those for a species of the related genus Paragaon Joseph, 1959.

Agaon megalopon nov. spec.

Material. — 15 ♀, 5 ♂, Nigeria, SE.-state, Obudu C[attle] R[anch], 27.IX.1973, ex *Ficus camptoneura* Mildbraed; RMNH no. 2432, ♀ holotype and ♀♂ paratypes slidemounted.

1 Q, Nigeria, EC.-state, Umuahia, at light, 10.IV.1975; RMNH no. 2565.

Description. — Female. Head (fig. 9) longer than wide across the compound eyes (16:13); the eyes bulging and very large, their longitudinal diameter 1½ times as long as the cheek; two lateral ocelli are visible. Antenna (fig. 7) consisting of eleven free segments: the scape is rather wide, with a hyaline dorsal edge and a sharp ventral projection; the pedicel small, subcircular in outline; the third segment with its appendage short, not reaching the apex of the rather long fourth segment; the fifth to eighth segments subequal, more than twice as long as wide, with three long and one short sensilla (fifth segment) to six long sensilla (other segments); the ninth to eleventh segments are shorter, and they bear more (ten to twelve) long sensilla in two rows. Labium and maxillae each with two (sub-)apical setae, the mandible with ca. nine ventral ridges, the apical-most of which are produced into sharp teeth; the mandibular appendage bears ca. 35 rows of up to ten fine crenulations.

Thorax with large mesosternal pollen pockets, and with a distinct corbicula on the fore coxa. Pronotum very short. Fore wing (2:1), 2.0 mm long; the submarginal, marginal, stigmal, and postmarginal veins approximately in ratio 8:4:3:6; the membrane with dense microtrichiae and with faint venae spuriae. Hind wing (9:2), 1.2 mm long. Tibial armature of the legs slight, consisting of a small bidentate hook on the fore tibia (fig. 8) and a very small antiaxial spur on the hind tibia. Approximate tarsal ratios: fore leg, 9:6:6:4:7; mid leg, 5:3:3:2:3; hind leg, 7:4:4:3:4; all with a plantar fringe.

Gaster. Hypopygium (fig. 6) with a rather long spine; the spiracular peritremata, situated in the basal portion of the eighth urotergite, rather large, subcircular; the pygostyle angular in outline, with three long apical setae and one basal.

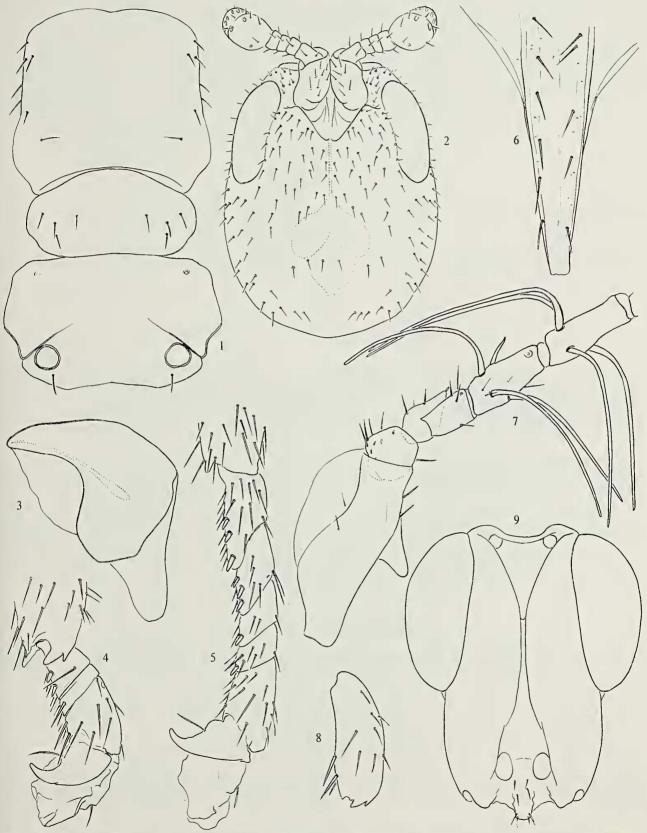
Length (head, thorax and gaster), ca. 2 mm long, the ovipositor 0.6 mm long. Colour yellowish, the head darker.

Male. Head (fig. 2) distinctly longer than wide (5:4), rather high in lateral aspect; the dorsal surface with many small setae. The eyes are very large, leaving place for a very short cheek. Antenna seven-segmented; the scape robust, with many long setae; the pedicel almost as long as the three-segmented funicle; the club large, divided at two-thirds of its length. Mandible (fig. 3) robust, with a large triangular part projecting over the stomal edge; one gland.

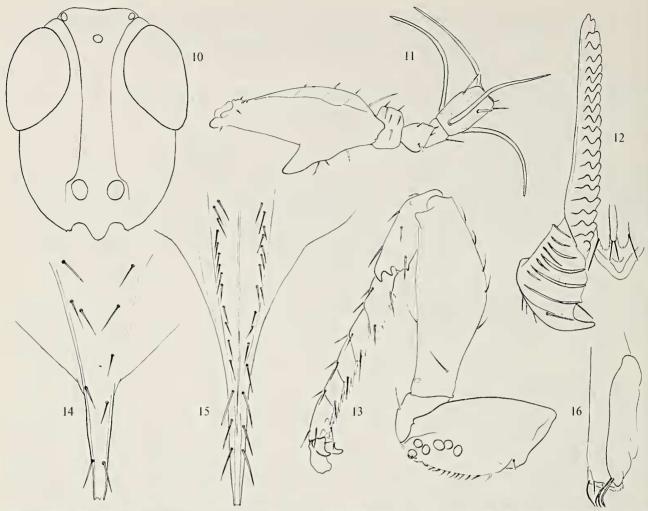
Thorax, fig. 1 (drawn and measured in a flattened position). The pronotum as long as wide, the mesonotum half as long; the metanotum three times as wide as long, curved ventrad laterally, incompletely separated from the propodeum, which bears large circular, spiracular peritremata. Fore leg: the tibial armature (fig. 4) consists of a dorsal tooth with an auxiliary one at half length, and a complex ventral tooth; the tarsus has three segments, the third of which bears a dorsal dent indicating an original division; the segments approximately in ratio 3:1:4,

with about six ventral cones on the metatarsus and one on the second segment, and with very long spine-like setae. Mid tarsi approximately in ratio 6:4:3:2:6. Hind leg long and slender; the tibia (fig. 5) with one distinct ventral tooth at the apex; the tarsal segments approximately in ratio 8:6:3:7, with small ventral cones.

Gaster. The genitalia simple, withouth parameres or claspers. Length (head and thorax), ca. 1 mm long. Colour yellowish, the head somewhat darker.



Figs. 1—9. Agaon megalopon nov. spec. 1—5, male; 6—9, female holotype. 1, thorax; 2, head; 3, mandible, dorsal aspect; 4, apex of fore tibia, and tarsus, antiaxial aspect; 5, apex of hind tibia, and tarsus, antiaxial aspect; 6, hypopygium; 7, proximal segments of antenna, axial aspect; 8, fore tibia, antiaxial aspect; 9, head. Magnification of figs. $1, 2, 9 \times 100$; other figs. $\times 200$.



Figs. 10—14. Paragaon perplexum Joseph, female. 10, head; 11, proximal segments of antenna, antiaxial aspect; 12, trophi; 13, fore leg, antiaxial aspect; 14, hypopygium. Figs. 15—16, Agaon spatulatum Wiebes, female. 15, hypopygium; 16, trophi, axial aspect. Magnification of figs. 10, 15, 16×100 ; other figs. $\times 200$.

Note. — The species resembles Agaon kiellandi Wiebes (1974: 124—127) from Tanganyika, reared from the sycones of an unnamed riverine strangler. The female differs in details of the head viz., the eyes are relatively smaller, two ocelli are present, the number of antennal sensilla is different, and the spine of the hypopygium is longer. The male is at once recognized by the configuration of the thoracical sclerites (compare fig. 1 with my fig. 11 of 1974), and by the trimerous condition of the fore tarsi (bimerous in A. kiellandi).

Agaon spatulatum Wiebes, 1968

Material (additional localities to those recorded before). — 1 \circ , Nigeria, W.-state, Akure, at light, 15.X.1974; RMNH no. 2575.

- 1 ♀, Nigeria, MW.-state, Udo, at light, 11.IV.1975; RMNH no. 2569.
- 3 ♀, Nigeria, SE.-state, Ikom, at light, 4.IV.1975; RMNH nos. 2572, 2598, 1 ♀ slide-mounted.
- 2 Q, Nigeria, SE.-state, Oban, at light, 7.IV.1975; RMNH no. 2612.

Descriptive note. — The labium has two apical setae, the maxillae three (fig. 16). The mesosternum has large pollen pockets, and the fore coxae bear distinct corbiculae. The hypopygium (fig. 15) is very long, drawn out into a sharp spine, with rows of relatively small setae.

Agaon baliolum Wiebes, 1974

Material (host record). — 13 ♀, Nigeria, SE.-state, Obudu C[attle] R[anch], 13.IV.1973, ex Ficus winkleri Mildbraed & Burret; RMNH no. 2430.

Paragaon perplexum Joseph, 1959

Material. — 47 ♀, Nigeria, SE.-state, Oban, at light, 7.IV.1975; RMNH no. 2606, 3 ♀ slidemounted.

6 ♀, Nigeria, EC.-state, Umuahia, at light, 10.IV.1975; RMNH no. 2624.

Descriptive note. — Joseph (1959: 36) studied two specimens from Mt. Nimba, French Guinea, one of which - the holotype - I have seen in a slide. The new samples from Nigeria allow of some additional notes.

Head (fig. 10). Antenna (fig. 11). Trophi (fig. 12); the labium with two apical setae, the maxillae with one subapical.

Thorax. The pronotum is entire, although short medially. The mesosternum has large pollen pockets, and the fore coxae bear distinct corbiculae (fig. 13). In the present specimens as well as in the holotype, the postmarginal vein of the fore wing fades out at half of the length of the marginal.

Gaster. The hypopygium (fig. 14) has a rather long spine.

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